**C - Remarks**

I. Claims Amendments:

The claims have been amended in order to better characterize the invention, in particular in view of the teachings of Tsuge et al. (US 2001/0002791).

Applicants have considered the Examiner' suggestion mentioned in the "Claim Objections" section (page 2 of the Office Action). In particular, amended claim 26 is now dependent upon claim 25.

Further, in an analogous manner, Applicants have amended claim 29 which is now dependent upon claim 23. Claim 23 clearly states that the linear sensor delivers two pairs of signals. This is also supported by the specification; see page 14 lines 20-23.

No new matter has been added by way of these amendments.

For sake of clarity, amendments to the claims are reflected in the enclosed listing of claims.

II. Claims Rejections under 35 USC 102 and 35 USC 103:

The Examiner rejected claims 20, 23, 27-28, 32-33 and 36 under 35 USC 102(b) as being anticipated by Tsuge et al. (US 2001/0002791).

Applicants respectfully disagree with the Examiner's interpretation of the teachings of Tsuge et al..

Tsuge et al. teach a device for processing a detected signal for a rotating sensor. Tsuge et al. is mainly interested in the processing of signals in the view of their effective transmission, namely without being affected by noise, in a particular application in the automotive industry. The processing device of Tsuge et al. comprises a rotational speed determining means and a signal selection circuit that outputs various signals (e.g. pulse signal indicative of a rotational direction, normal rotation signal, signal pattern for an error code, etc...). The rotational speed determining means determines whether the rotational speed of the rotor reaches a predetermined rotational speed. The various output signals that may be generated depends among others parameters whether it is determined that the rotational speed of the rotor has reached/exceeded a predetermined rotational speed. It is to be emphasized that Tsuge et al. uses this speed threshold (predetermined

rotational speed) in order to determine whether a normal or abnormal situation occurs and outputs one of the hereinbefore mentioned signals in dependence of this comparison result (see page 5 [0091]).

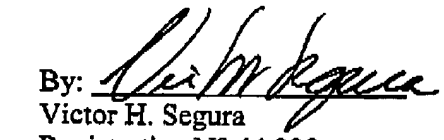
Contrary to the Examiner' statement, Tsuge et al. do not teach to use the frequency of the modulated current or the number of transitions of said modulated current in order to determine the speed of the rotating sensor. In particular, Figures 7A-7H show the signal input and the various signal outputs which enables determining the normal or reverse rotation of the rotating sensor, normal or abnormal situation. Further, Figures 7A-7H do not show a modulated current from which it would be possible to determine the speed of the rotating sensor based on the frequency of the modulated current or the number of transitions of said modulated current (see page 4 [0085]). Finally, Tsuge et al. fails to teach the generation of a unique signal that would incorporate the speed and direction of rotation of the rotating sensor.

None of the other teachings, namely Ott et al. (US6,282,954), Shinjo et al. (US6,630,821), Kessler (US6,859,000), Gauthier et al. (US2002/0149275) or Daigle (US5,715,162) clearly reveals or even suggests to determine the speed of the rotating sensor based on the frequency of the modulated current or the number of transitions of said modulated current.

Thus, Applicants are of the opinion that amended claim 1 focusing on the determination of the speed as explained hereinbefore is new and inventive. Consequently, the dependent claims are also new and inventive. Thus, the amended claims including all the dependent claims should be allowable over the prior art.

Applicant is of the opinion that this reply is fully responsive to all outstanding issues. Accordingly, the application is now deemed to be in condition for allowance, and favorable reconsideration on the basis of these amendments and remarks is solicited.

Respectfully submitted,

By: 
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